Abstract of the Disclosure

An apparatus dispenses detergent into a warewasher from a reservoir wherein a flow control device controls the flow of the detergent. A sensor measures the electrical conductivity of water within the warewasher and produces a conductivity measurement. A controller operates the flow control device in a first mode in which the quantity of detergent dispensed into the warewasher is determined in response to the electrical conductivity of the water. If the conductivity measurement is determined to be unreliable, the controller operates in a second mode in which a predefined quantity of detergent is dispensed into the warewasher. The reliability of the conductivity measurement is determined based on the amount that the conductivity changes upon detergent being added to the warewasher.